

## PATENT ABSTRACTS OF JAPAN

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## (54) COLORED FERRITIC STAINLESS STEEL AND ITS PRODUCTION

## (57)Abstract:

PURPOSE: To inexpensively produce a clear colored ferritic stainless steel free from striped irregularity by bringing an aqueous solution containing chromic acid and sulfuric acid into contact with the surface of a ferritic stainless steel having specific random texture.

CONSTITUTION: An aqueous solution containing chromic acid and sulfuric acid is brought into contact with the surface of a ferritic stainless steel having a random texture in which X-ray integrated intensity ratio does not exceed 3.0 in the textures at least in all of the (222), (211), (110), and (200) planes. By the above contact treatment, an oxide film is formed on the surface of the above steel and coloring is performed. The above-mentioned specific texture can be formed by a method in which a slab of ferritic stainless steel, such as SUS430 steel, is hot-rolled at &ge; about 850°C, cooled rapidly at &ge; about 10°C/S cooling rate immediately after the conclusion of rolling, coiled at &le; about 550°C, cold-rolled at &ge; about 50% cumulative rolling reduction, and annealed. By this method, the colored ferritic stainless steel free from the occurrence of striped irregularity, having homogeneous color tone, and suitable for building material use, ornamental use, etc., can be obtained.

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